

A NEW SPECIES OF *GLANDULARIA* (VERBENACEAE) FROM TAMAULIPAS, MÉXICO

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ABSTRACT

Glandularia brachyrhynchos is described from the Sierra de San Carlos in north central Tamaulipas, México. It has a strongly inflated nutlet and other characters of *G. tumidula* (Perry) Umber that imply that the two are sister species. The new species differs most prominently from its close relative in having non-glandular stems and leaves, shorter, stiffer stem pubescence, and an extremely abbreviated calyx "beak."

GLANDULARIA brachyrhynchos Nesom & Vorobik, sp. nov. Fig. 1.

Glandularia tumidula (Perry) Umber affinis sed caulibus et foliis non glandulosis, pubescentiis caulibus brevioribus rigidioribus, pagina supra foliorum strigosa, rostro calycum brevi, et lobis corollarum angustioribus differt.

Annual herbs from a very slender taproot and numerous fibrous roots. Stems 7–25 cm tall, erect to ascending, primary branches on the lower half; moderately pubescent with spreading to slightly deflexed, stiff, dull trichomes 0.3–1 mm long, eglandular or minutely stipitate-glandular for 3–10 mm immediately below the inflorescence. Leaves opposite, widely ovate-deltate with three pairs of primary lobes, the lobes again shallowly lobed or serrate-dentate, apices rounded to acute, base cuneate and attenuate to a petiole 5–10 mm long, blades sparsely hispidulous beneath, moderately strigose above with appressed trichomes 0.2–0.6 mm long, both surfaces eglandular. Spikes compact in flower and fruit, ca 8–13 flowered, on short peduncles 12–30 mm long; bractlets ovate-lanceolate to linear-lanceolate, 4–5 mm long, ca half as long as flowering calyx. Calyx in flower 6.5–8 mm long, including the filiform-lanceolate teeth 0.5–0.7 mm long, strongly inflated in fruit, 5.5–6.5 mm long with a very short non-inflated portion ("beak") 2–3 mm long, half or less the length of the inflated portion; calyx and bractlets moderately pubescent with spreading trichomes, moderately to densely glandular with stipitate-glandular trichomes 0.1–0.2 mm long. Corolla blue-purple, the tube 12–15 mm long, 7–8 mm longer than the calyx, sparsely puberulent outside, limb 6–10 mm wide, the lobes 1.8–3 mm wide.

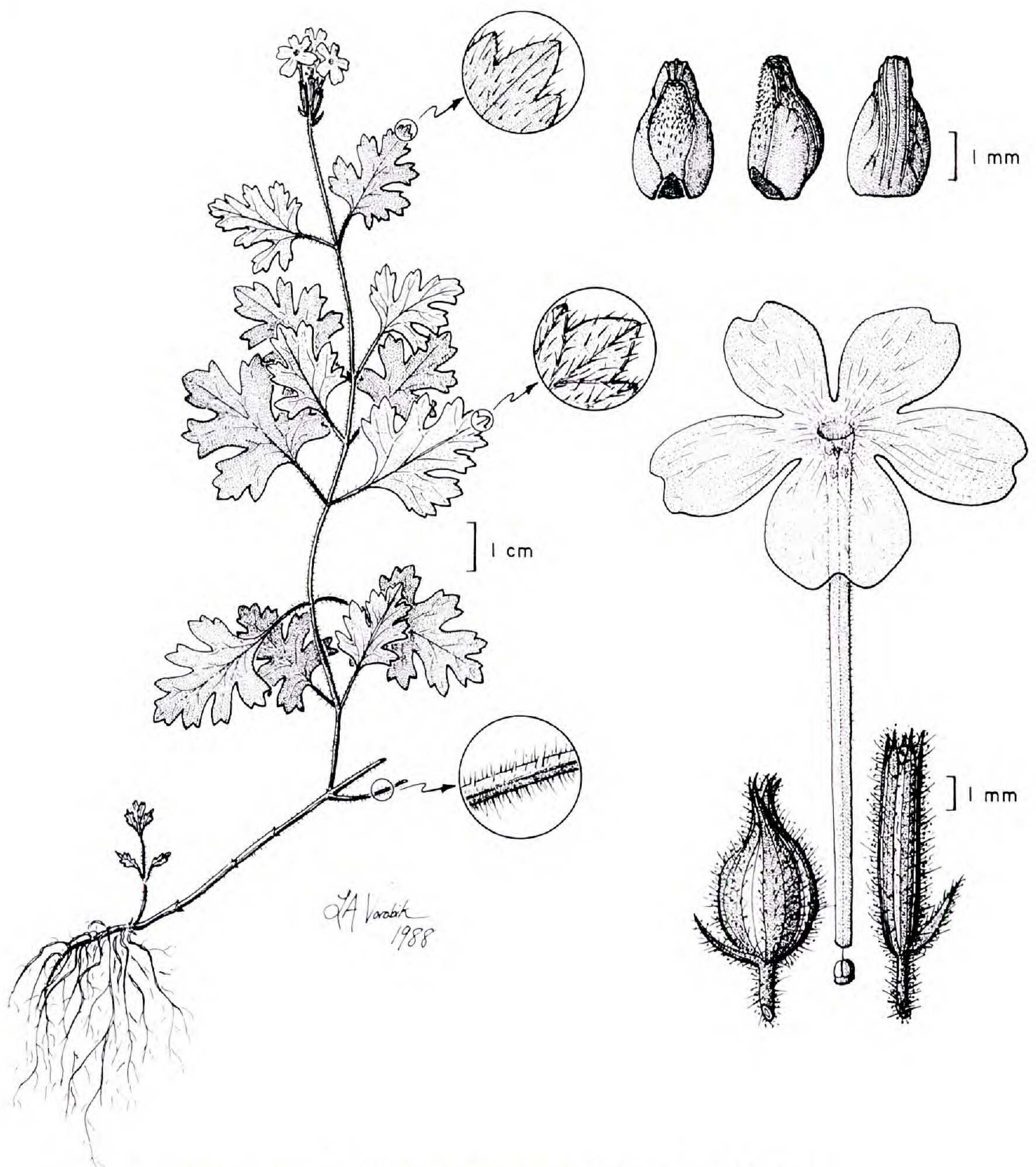


FIG. 1. Habit and details of *Glandularia brachyrhynchos* (from the holotype).

Anthers not glandular. Nutlets 2.8–3 mm long, the lower $2/3$ – $3/4$ laterally inflated and 1.5 mm wide, lateral surfaces smooth, dorsal ridge prominently ridged, reticulate at the apex, the commissural face nearly reaching the top of the nutlet, rounded and smooth in the inflated portion, densely white toothy-papillate on the upper half.

TYPE: MEXICO. TAMAULIPAS, Mpio. San Carlos, Sierra de San Carlos, ca 8 km N of San Carlos, N side of Bufo El Diente, igneous bedrock, woods of *Quercus*, *Ostrya*, *Carya*, scattered *Abies*; common in partial clearings in woods; ca 750–1100 m; 24°31.5'N, 98°57.6'W; 18 Jun 1987, Guy Nesom 6084 with John Norris, Mahinda Martínez, and Lindsay Woodruff (HOLOTYPE: TEX; ISOTYPES: MEXU, VICT).

Glandularia brachyrhynchos is a member of the species group that includes *G. delticola* (Small) Umber, *G. polyantha* Umber, *G. verecunda* Umber (the preceding three are very similar among themselves), *G. quadrangulata* (Heller) Umber, and *G. tumidula* (Perry) Umber. These all possess leaves that are generally deltate to ovate with lobed but not strongly pinnatifid margins, nutlets with widely flaring bases, commissures nearly reaching the top of the nutlet, and densely white toothy-papillate commissural faces. Within this group, the new species is clearly most similar to *G. tumidula*, with which it shares nutlets that are strongly inflated in the lower $2/3 - 3/4$ and that have smooth lateral faces and a prominent, wide, often ornamented, dorsal ridge.

Glandularia tumidula differs from *G. brachyrhynchos* in the following features: leaves more dissected; leaves and stems densely stipitate-glandular from top to bottom of the plant; trichomes of upper leaf surfaces erect; trichomes of stems 0.4–2 mm long, more dense, flexuous, and vitreous; non-inflated portion ("beak") of fruiting calyx as long or longer than the inflated portion; and corolla lobes 3.5–5.5 mm wide. The geographic range of *G. tumidula* is from northeastern Coahuila to south-central Texas; from the Sierra de San Carlos to the closest known collection of *G. tumidula* in Coahuila, the two species are separated by about 400 kilometers.

REFERENCES

- UMBER, R.E. 1979. The genus *Glandularia* (Verbenaceae) in North America. Syst. Bot. 4:72–102.